

Operator Manual

UL20

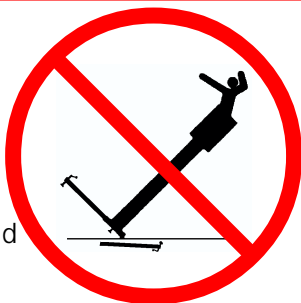
SERIAL NUMBERS 17745 TO CURRENT

WARNING

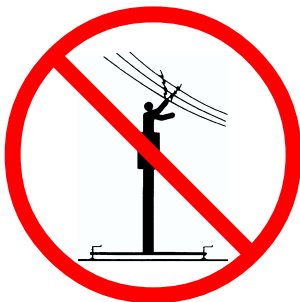
All personnel shall carefully read, understand and follow all safety rules, operating instructions and the Scaffold Industry Association's MANUAL OF RESPONSIBILITIES before performing maintenance on or operating any UpRight aerial work platform.

SAFETY RULES

NEVER elevate platform unless all four (4) outriggers have been properly installed. All outrigger screwjack pads must be in solid contact with a firm surface before the platform is elevated.



NEVER attempt to move the UpRight Lift with people or materials on the platform or with the platform elevated.



NEVER operate the machine within ten feet of power lines. **THIS MACHINE IS NOT INSULATED.**



NEVER sit, climb, or stand on the platform guardrails or midrail.



NEVER elevate platform without first leveling the base.

NEVER use ladders, planks or other devices to increase the height of the platform.

NEVER attach overhanging loads to the platform or increase the platform size.

NEVER elevate the platform if it contains more than one person or more than the rated load (see specifications on back page).

LOOK up, down and around for overhead obstructions and electrical conductors.

NEVER change operating or safety systems.

NEVER use outriggers from one model on another model.

CLOSE and secure cage mid rail after entering platform.

INSPECT the machine thoroughly for cracked welds, loose or missing hardware, hydraulic leaks, damaged control or power cables and loose wire connections.

NEVER use the machine as a freight or personnel elevator.

NEVER recharge battery near sparks or open flame; batteries that are being charged emit highly explosive hydrogen gas.

AFTER USE secure the work platform against unauthorized use by turning key switch off and removing key.

NEVER replace any component or part with anything other than original UpRight replacement parts without the manufacturer's consent.

Outrigger Installation

1. Pull each front outrigger out until lockpin engages (Figure 1A).
2. Rotate each rear outrigger out towards rear of machine and push in place until lockpin engages (Figure 1B).
3. Level the base, centering the bubble in the orbit level, using screwjacks at the end of each outrigger. Do not release tension on an outrigger by turning screwjacks counter clockwise to level the base.
4. **All four (4) screwjack pads must be in solid contact with a firm surface. Each interlock switch must be engaged before the platform will elevate.**

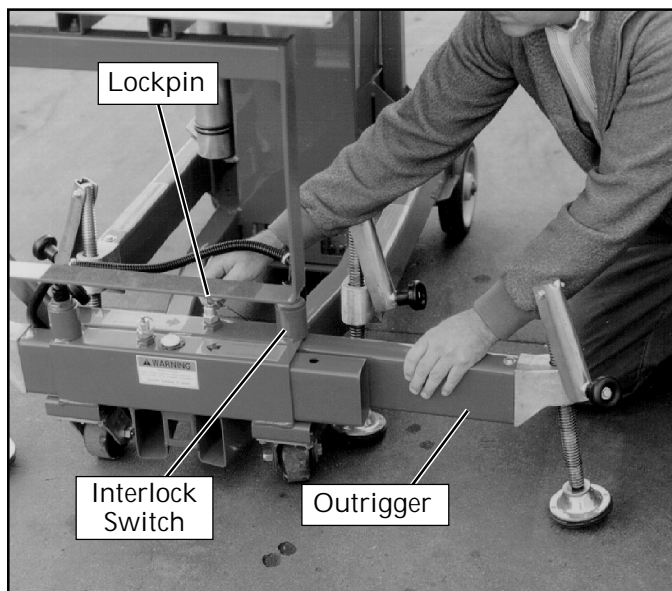


Figure 1A: Installing front outriggers

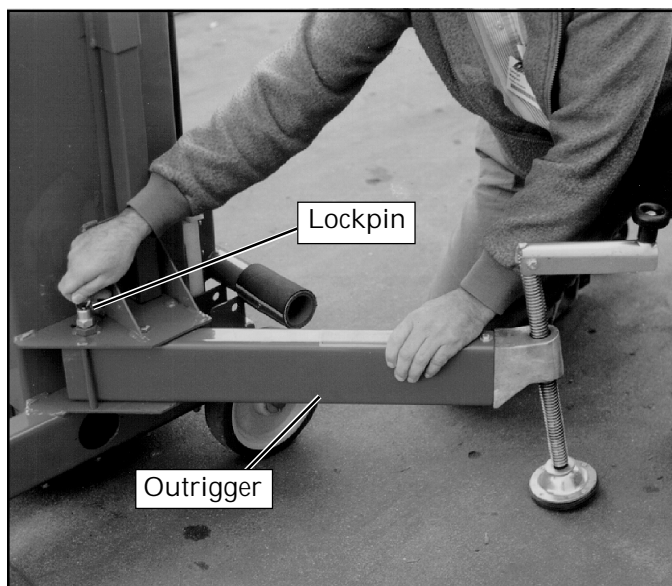


Figure 1B: Installing rear outriggers

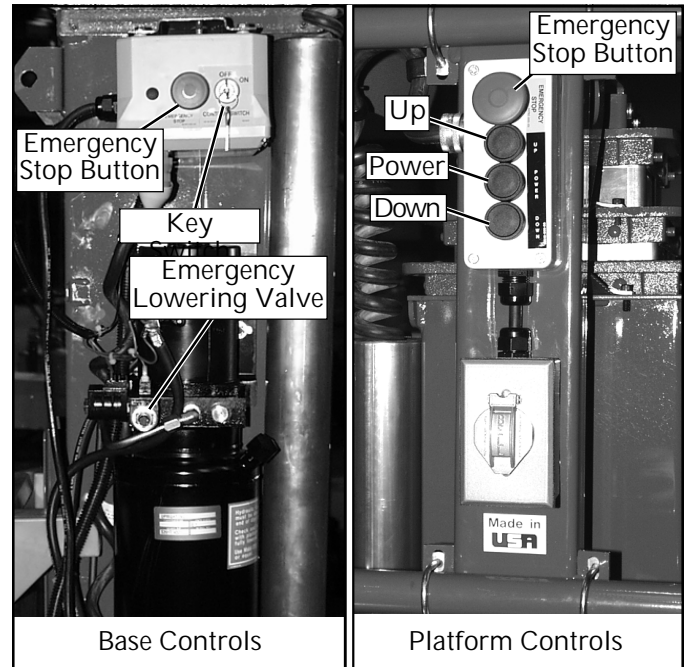


Figure 2: Controls

Operation

Before operating UL Lift insure that: the operator has been thoroughly trained on this machine, the operator has read, fully understands and follows this Operator Manual and the Scaffold Industry Association's MANUAL OF RESPONSIBILITIES, the unit has been properly set up with all four (4) outriggers properly installed and the base leveled, and the machine has passed the Safety Interlock Test.

Note: Platform will not elevate unless all four outriggers are properly positioned with screwjack pads firmly in contact with floor and each outrigger indicator lamp lit.

1. Check for external damage to the mast.
2. For AC units connect power unit plug to extension cord (12 ga.) (1.5 mm²) conductor minimum and 50 ft. (15 m) in length maximum). Connect extension cord to properly grounded outlet of proper voltage and frequency.

NOTE: AC units are protected by a 15 amp circuit breaker. If breaker trips, push button in to reset breaker (Figure 3).

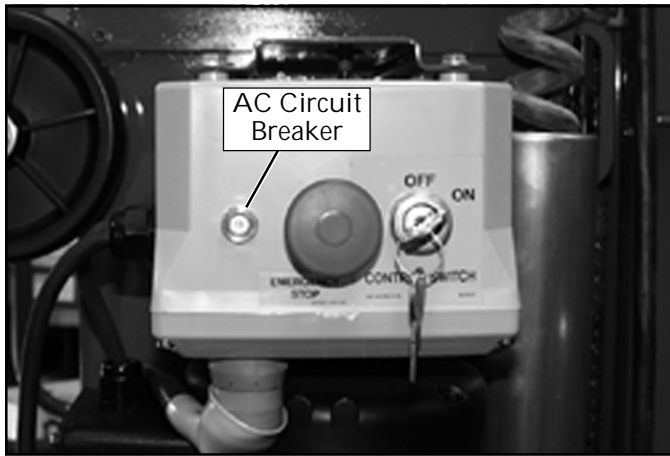


Figure 3: AC Base Controls

3. Turn Key to **ON**. Key Switch is located on the left side of the mast (Figure 2).
4. Pull out on Lower Emergency Stop Button, located on the left side of the mast (Figure 2), to turn switch ON. In the event of an emergency push the button in to cut power to all controls.
5. Enter the platform by lifting up on the cage mid rail.
6. Lower cage mid rail after entering platform.
7. Check that the area above the platform is clear before elevating the platform.
8. Pull out on Emergency Stop Button, located on platform control panel (Figure 2). In the event of an emergency push the button in to cut power to all controls.
9. Push both the middle and top buttons (POWER and UP), on the platform control panel (Figure 2), at the same time to elevate the platform. Release the buttons to stop.
10. Check that the area below the platform is clear before lowering the platform.
11. Push both the middle and bottom buttons (POWER and DOWN) at the same time to lower the platform. Release the buttons to stop.
12. After use, secure unit from unauthorized use by turning Key Switch to **OFF** and remove key.

EMERGENCY LOWERING



WARNING



If the platform should fail to lower, **NEVER** climb down the mast.

Ask a person on the ground to open the Emergency Lowering Valve to lower the platform. This valve is located on the left side of the mast (Figure 2).

1. Pull the knob out and turn $\frac{1}{4}$ turn to open the Emergency Lowering Valve.
2. To close the Emergency Lowering Valve, turn the auxiliary platform lowering knob until it snaps back in.

Once the platform is fully lowered, be certain that the Emergency Lowering Valve is closed again. The platform will not elevate if the Emergency Lowering Valve is open.

NOTE: Optional auxiliary platform lowering circuit allows operator to lower platform when power source is interrupted. A warning light on base control box shines when batteries for auxiliary platform lowering circuit are low (Figure 4). Batteries are located inside base control box.



Figure 4: Warning light shines when batteries for optional auxiliary platform lowering circuit are low.

AFTER USE EACH DAY

1. Ensure that the platform is fully lowered.
2. Park the machine on level ground, preferably under cover.
3. Secure against vandals, children or unauthorized operation by turning the Key Switch to **OFF** and remove the key.

Safety Interlock Test



DANGER



NEVER perform this test from the platform.

1. Properly set all four (4) outriggers and level base.
2. Release the tension on one (1) outrigger by turning the screwjack counterclockwise.
3. While standing on the ground activate the control panel to elevate the platform. **Platform should not elevate.**
4. Re-level the base with all four (4) outriggers then repeat step 2 with another outrigger.
5. Repeat steps 2, 3 & 4 until all four (4) outriggers have been tested.

DO NOT use a machine that elevates when the tension has been released on an outrigger.
Machine must be repaired before using.

Battery Maintenance



WARNING



Hazard of explosive gas mixture. Keep sparks, flame and smoking materials away from battery.

Always wear safety glasses when working with batteries.

Battery fluid is highly corrosive. Rinse away any spilled fluid thoroughly with clean water.

Always replace battery with UpRight battery or manufacturer approved replacement weighing at least 76 lbs. (34.5 kg) each.

Check battery fluid level daily, especially if work platform is being used in a warm, dry climate.

If electrolyte level is less than $\frac{3}{8}$ in. (10 mm) above plates add distilled water only. **DO NOT** use tap water with high mineral content, it will shorten battery life.

Keep terminals and tops of batteries clean.

Refer to the Service Manual to extend battery life and for complete service instructions.

BATTERY CHARGING (Figure 5)

Charge batteries at end of each work shift or sooner if batteries have been discharged.



WARNING



Charge battery in a well ventilated area.

Do not charge battery when the work platform is in an area containing sparks or flames.

Permanent damage to battery will result if not immediately recharged after discharging.

Keep charger dry.

1. Check battery fluid level. If electrolyte level is lower than $\frac{3}{8}$ in. (10 mm) above plates add distilled water only.
2. Verify charger voltage switch is set to 12 volts.
3. Connect extension cord (12 ga. (1.5 mm²) conductor minimum and 50 ft. (15 m) in length maximum) to charger plug. Connect extension cord to properly grounded outlet of proper voltage and frequency.
4. Set charger control to "conventional" setting. Charger ammeter should indicate charge rate.
5. When battery is fully charged, charger automatically turns itself off. Disconnect extension cord.

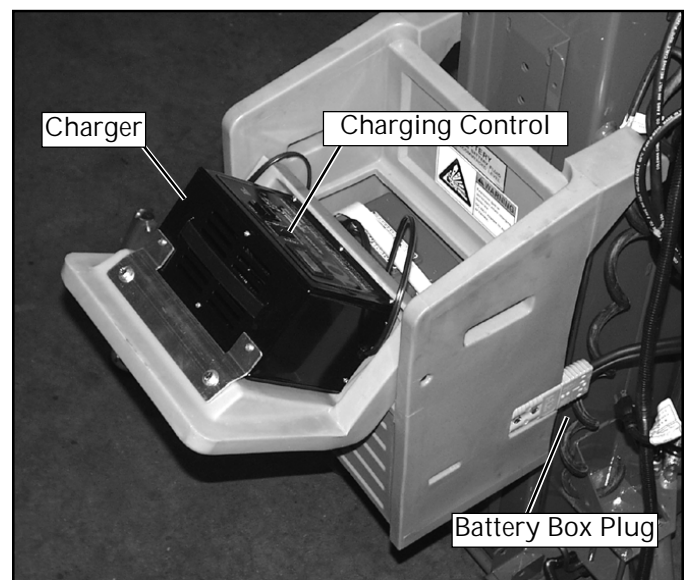


Figure 5: Battery Box (DC Models only)

Loaders

DC MODELS

Disconnect the plug from the battery box and remove the battery box from the rear of the machine (Figure 5).



CAUTION



The battery box is heavy, 76 lbs. (34.5 kg), lift properly (or have someone help you) to prevent back injury.



WARNING



Make sure loader fully engages tailgate or vehicle bed.

LOADING

1. Raise the loader support bracket and engage the retaining pin in the top hole of the loader channel (Figure 7).
2. Secure the loader to the loader support bracket with the gravity hook (Figure 7).
3. Position the unit so the back of the machine comes in contact with the vehicle bed or tailgate.
4. Release the retaining pin and slide the loader down until it comes into contact with the vehicle bed or tailgate (Figure 7). Reposition the loader support bracket so the retaining pin is in the **first** available hole above the loader.
5. Remove loading handle from storage position on left side of mast. Secure loading handle in loading position in base of unit using clevis pin. (Figure 6).
6. Lift up on the loading handle, using the loader as a pivot until the unit rotates to a horizontal position in the vehicle bed (Figure 8).

7. Push the base of the unit towards the front of the vehicle bed. The machine will slide on the loader until the rear wheels are on the bed. The unit may then be rolled on the rear wheels and upper wheels.
8. Return the loading handle to the stored position.
9. Secure the unit with suitable strength rope or tie straps.

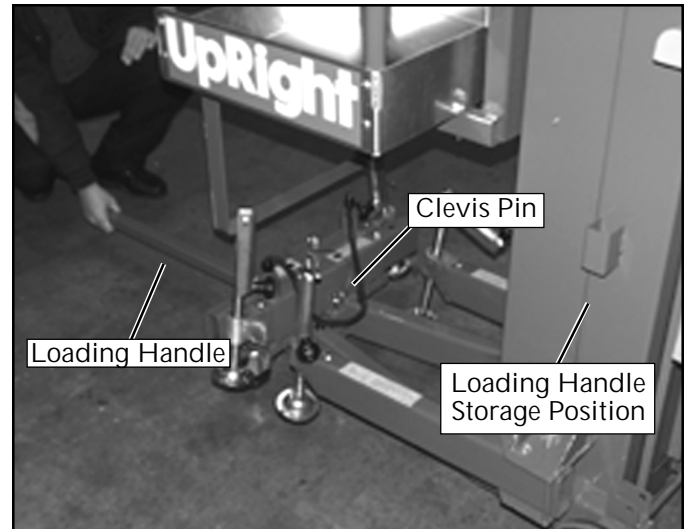


Figure 6: Installing loading handle



CAUTION



To prevent damage to the mast assembly, do not place rope or tie straps across the mast assembly when securing the unit for transportation.

DO NOT overtighten the rope or tie straps, damage to the machine will result.

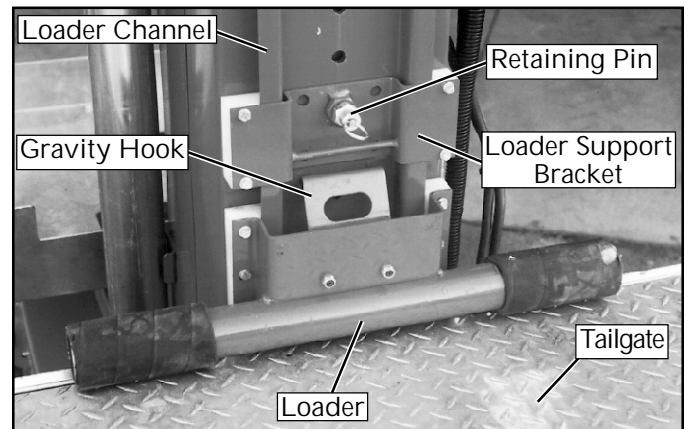


Figure 7: Loader in load position



Figure 8: Tilting machine onto or off of a vehicle



Figure 9: Pushing machine into transport position

UNLOADING

1. Unsecure the unit.
2. Remove loading handle from its storage position on left side of mast. Secure handle in base of unit using clevis pin (Figure 6).
3. Roll the unit back until the rear wheels are off the edge of the tailgate or vehicle bed.
4. Pull downward on the loading handle, allowing the unit to slide on the loader. As the unit stops sliding on the loader, it will pivot on the loader to an upright position. Gradually counterbalance the unit's weight by applying an upward force on the loading handle. This allows the unit to settle gently on the wheels, avoiding undue impact on the unit.
5. Return the loading handle to its storage position.

DC Models

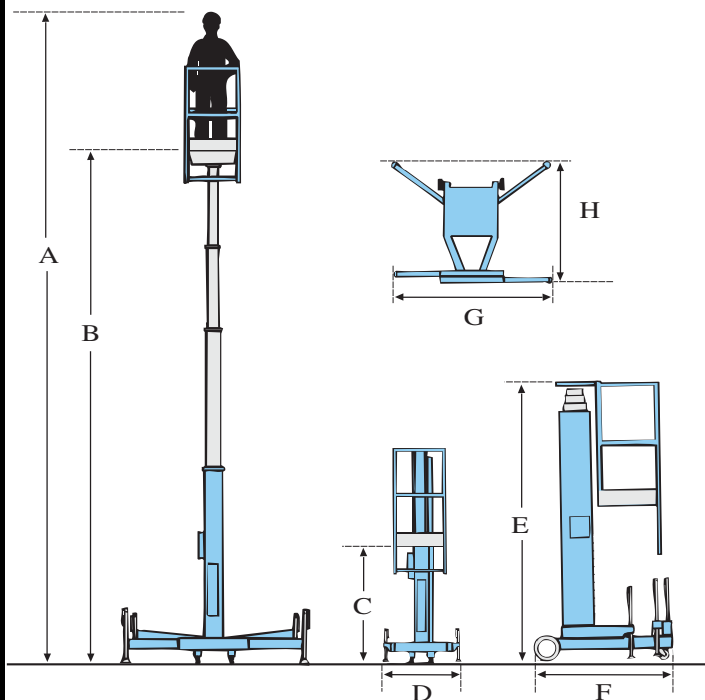
Reinstall the battery box and reconnect the plug making certain it is fully engaged.

Passage Through A Doorway

When completely lowered, UL20 will pass through a standard doorway without tilting back.

UL LIFT LABEL INSTALLATION: THESE LABELS SHALL BE PRESENT AND IN GOOD CONDITION BEFORE OPERATING THE WORK PLATFORM. BE SURE TO READ, UNDERSTAND AND FOLLOW THESE LABELS WHEN OPERATING THE WORK PLATFORM.





Working Height (A)	25 ft. 6 in. (7.8 m)
Platform Height (Max) (B)	19 ft. 6 in. (5.9 m)
Platform Height (Lowered) (C)	34-1/2 in. (0.87 m)
Platform Capacity	350 lbs. (159 kg)
Platform Dimensions (l x w)	22 in. x 26 in. (0.56 m x 0.66 m)
Unit Dimensions (G x H)	55 in. x 53 in. (1.4 m x 1.35 m)
Outriggers Extended (I x w)	29 in. x 78 in. x 45 in. (0.74 m x 1.98 m x 1.14 m)
Unit Dimensions (D) (E) (F)	29 in. x 78 in. x 45 in. (0.74 m x 1.98 m x 1.14 m)
Outriggers Stowed (w x h x l)	
Net Weight	646 lbs. 293 kg
A.C. Model with outriggers	
Net Weight	698 lbs. 317 kg
D.C. Model with outriggers	

*Specifications subject to change without notice.

Meets or exceeds all applicable requirements of OSHA and ANSI A92.3-1990.

ROUTINE SERVICE

Use the following table as a guide for routine maintenance, refer to Service and Parts Manual for complete service instructions.

SERVICE OPERATION	INTERVAL			
	DAILY	MONTHLY OR 50 HRS.	3 MONTHS OR 125 HRS.	YEARLY OR 500 HRS.
Check bubble level accuracy	X			
Check operation of outrigger interlocks	X			
Check battery fluid level and charge battery (D.C. models only)	X			
Check for peeling, faded or missing labels & replace	X			
Check condition of control cable	X			
Inspect mast assembly for bends, cracks or loose rivets	X			
Check chassis and platform emergency stop switch operation	X			
Check emergency lowering valve operation	X			
Check casters for damage	X			
Check hydraulic fluid level		X		
Check cage and cage support fasteners for proper torque		X		
Inspect and adjust sequence straps slack		X		
Lubricate lift chains and sheaves			X	
Change hydraulic fluid (ISO #46)				X

UpRight

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